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Consumer-driven innovation management

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CHAPTER 21

Consumer-Driven Innovation Management

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Abstract: The evolution of human society leads to increased affluence and prosperity of certain populations, sometimes at the expense of well-established markets. Market leaders in products and services tend to be so focused on their current customer base that they are caught off guard with the changes in markets created by the evolution. These changes often go unnoticed until it is too late. The change in customer base often requires the repositioning of products and services through innovations, which address new and emerging markets. Some of these changes could potentially result in tectonic market shifts that force innovation managers to involve current and future customer bases in order to help understand the opportunities that can lead to innovation. The nature of these innovations could span the range from addressing the mundane needs of developing countries to meeting the wishful aspirations of mature markets. Firms are often at a loss on when and how to use customer-inspired insights in the goal to create new innovations. Innovation management takes on a new art form that engages customers, allowing them to reveal their unmet needs. Such a fuzzy front-end process demands new engagement styles and structures that are less obvious to those who use traditional tools such as surveys and focus group research. This chapter identifies the challenges faced by firms in responding to a less-traversed approach toward using customers to identify innovation opportunities, and suggests methods to manage such challenges.

Keywords: Innovation, consumer-insights, fuzzy front-end.

BACKGROUND

Have you wondered what Boeing, BMW, Coors, Electronic Arts, IKEA, Lego, and Staples have in common? All of them have started engaging their customers in one form or another to identify their innovation-led growth opportunities.

Many companies achieve market leadership from one or more initial innovations. They even catapult themselves into the Fortune 500 or equivalent star lists. And then something sad happens. Even the best of innovations, however well

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protected, attract competition. The market leaders set their sights on the competition, and a new, hitherto unsuspected, competitor creeps into their market. This focus, often entirely on the company's acknowledged, major competition is normally the beginning of the end of a company's ability to sustain its market leadership. The only sustainable competitive advantage any company can enjoy is its ability to stay focused on its customers and increase its customer base by creating a string of innovative products and services.

Companies traditionally had either their marketing departments or their planning or strategy departments worry about the next set of products and innovations, which would help them retain their market leadership. This approach usually worked when the innovations were incremental. If a company was producing black and white television sets, it would make sense for it to consider producing color television to satisfy the demands of their customers, who were craving enhanced experiences.

There are often disruptions in either technology or the markets, which require a totally different approach to creating innovations. For example, if a firm creating shampoos left the planning of its next innovations to its marketing department, it would most likely end up creating next generation shampoos with additional functional or emotional appeal for developed economies. However, it was those who saw the product through customers' eyes who discovered that shampoo in a sachet as a new innovation was very powerful to expand their customer base, and hence their revenue base and profits (Prahalad, 2005). Understanding customer requirements remains an extremely important step in a company's desire to create innovations that will succeed.

Understanding and identifying customer requirements has been a holy grail for the product and service designers and managers. The task of identifying customer requirements can be approached from multiple perspectives. A robust approach would be to use Maslow's hierarchy of needs as a framework to identify customer needs (Maslow, 1943). Another approach would be to understand cultural diversities to identify innovations. A third approach could be to use the differences between needs and wants in order to identify customer requirements. A fourth approach might be to understand how innovations have evolved in the past and use this knowledge to identify customer requirements for the next set of innovations. Finally, one could use open innovation (Chesbrough, 2003) as a

mechanism to identify customer needs. No matter which of these paths pursued to identify customer needs, it is very important that the customers themselves are integrated into the identification process. It is those products that can be truly called customer-led innovations.

The concept of co-creation was introduced in 2000 (Prahalad and Ramaswamy, 2000). Consumer-inspired innovation is but one of the many forms of co-creation. The objective is to get the product developers and the lead users to be actively engaged in identifying innovation opportunities. In 2009, Promise Corporation worked with LSE Enterprise to sharpen the definition of co-creation into "co-creation is an active, creative and social process, based on collaboration between producers and user…initiated by the firm to generate value for customers" (LSE Enterprise and Promise Corporation, 2009).

In this chapter, we discuss co-creation or consumer-inspired innovation from each of the perspectives listed in the previous paragraph. The use of Maslow's hierarchy of needs will be discussed next. After that, we will discuss co-creation using cultural diversity, and then the differences between the needs and the wants and the methods of involving consumers in creating innovations in each of the categories. Innovation evolution paths will be introduced next, and then we will discuss the use of abduction in consumer-inspired innovations. Finally, we will touch on the use of open innovation in consumer-inspired innovation and present some examples from Proctor and Gamble (P&G). We conclude with a summary of our discussions.

Figure 1: Maslow's hierarchy of needs.

MASLOW'S HIERARCHY OF NEEDS

Abraham Maslow identified five different levels of human needs starting from physiological needs and ending up with needs for self-actualization as presented in Fig. **1**. Each of the five categories of needs have been further studied and their respective subcategories have been defined, as shown by Table **1**.

Table 1: Some Subcategories of Maslow's Hierarchy of Needs.

Level	Need category	Need subcategories
5	Self-actualization	Creativity, morality, objectivity, open-mindedness, problem solving, spontaneity
4	Esteem	Achievement of vision, confidence, respect by others, respect for others, self-esteem
3	Love/Belonging	Family, friendship, intimacy, member of a community
2	Safety	Emotional, family, personal, physical, possessions, professional, social
1	Physiological	Air, food, water, shelter

A preferred approach to consumer-inspired innovation first ascertains the level in the hierarchy of needs toward which a product or services is currently positioned. Then, one involves consumers to identify specific needs for innovations at the higher levels of the hierarchy.

The question arises regarding what might be the best means of engaging the customers in identifying such needs. Popular approaches such as focus group research or surveys represent well-tested instruments for revealing a person's explicitly understood needs. Oftentimes, a need remains latent until it is revealed, and thus discovered. It is in such instances that one needs to employ other observation-based techniques.

When an innovation addresses a physiological need such as shelter, it is time to involve consumers to discuss their needs at the safety level, *i.e.* securing their shelter. After the safety needs have been met, then the company can address innovations at the next level—Belonging.

For example, a product innovation at the "belonging" level may be a new type of community hall, a meeting space where the residents of a community can come

together and which is accompanied by service innovations such as providing novel entertainment to the community. Once the needs at the belonging level are delivered, innovations at the "esteem" level can be addressed. An example might be service innovations for leadership training or presentation skills. At every level consumers need to be involved to determine their specific needs. Once the needs at the esteem level are addressed, the needs at the self-actualization level can be explored. An example could be creativity-related training.

It is important to note in this example that the consumers are involved in every step of the innovation process, and at every level. The involvement of consumers can happen both proactively or reactively. For example, someone who has built a shelter may proactively design a mechanism for securing the shelter in consultation with consumers. Alternatively, a security-related innovation might be in response to an unfortunate event such as a robbery. Although securing a shelter is a need, it might lie dormant or latent until a robbery takes place. "What if" analyses or scenario planning are useful tools to identify latent needs of a customer base, especially in cases where one does not wish to wait for unusual, rare, or unfortunate events to happen as a spur to innovation.

CULTURAL DIVERSITY OF CUSTOMERS

The previous section discussed how the needs shift from one level of Maslow's hierarchy to the next and the importance of getting consumers involved. This section discusses how culture has an impact on the innovations.

In some cities of the world (based on a 1984 Tokyo experience), the houses were never locked. The neighbors were trustworthy, and there was very little robbery or thievery. Thus, securing one's house was interpreted as lack of trust of the neighbors. Contrast this with a house in a very insecure neighborhood frequented by robbers. No one would take offense in producing an innovation for securing a house in such a neighborhood. This is an example of how culture might influence the need for and the realization of innovations.

There are many dimensions to understanding cultural diversity, beginning with linguistic differences all the way to practices imposed by a religion. Take biometrics, for example. A fingerprint-based biometric identification system will

face huge entry barriers in Islamic countries as well as in Japan, but for very different reasons. In Islamic countries, putting a finger on a scanner that was used by others might be considered "haram" or dirty. In contrast, fingerprinting was used in Japan at that time to identify criminals and foreigners, and hence it was not considered to be the "right innovation" for ordinary usage.

Sometimes, innovations are dictated by cultural or religious factors. For example, the Casio Islamic Prayer Digital Watch CPW-310, as presented in Fig. **2**, was invented to address the needs of the Islamic communities in identifying the direction of Qibla (direction that should be faced when a Muslim prays) from anywhere in the world. In addition, this watch also carried the Hijra calendar and alarms for prayer times. It is clear that such a watch could not have been designed without the involvement of the respective consumer base.

Figure 2: Casio Islamic prayer digital watch CPW-310-1 VDS.

DIFFERENTIATING BETWEEN NEEDS AND WANTS

Innovations can be created to address both the needs and the wants of consumers. "Needs" are "must have" requirements; hence, any innovation addressing needs

are easily accepted by the target markets. In contrast, "wants" are "good to have" requirements; hence, any innovation addressing wants is much harder sell. Typically, start-ups tend to be the drivers of innovations that address the needs, whereas incumbents are the ones whose innovations address the wants.

Needs are things that human society must have for its existence. Examples are:

- Nutritious food
- Shelter (dwelling)
- Clothing
- Footwear
- Transportation

Wants are things that are good to have if one can afford it. Examples are:

- Designer clothing
- Toys
- Chocolates
- Video games
- Jewelry

Some innovations are wants that are, in truth, simply enhancements of needs. Table **2** outlines such instances using the five needs listed above.

Table 2: Innovations That are Wants Built Upon Needs.

Needs	**Wants**
Nutritious food	Gourmet food
Basic housing	Gated resort property
Clothing	Fur coats and haute couture
Footwear	Branded shoes
Transportation	Sports cars

Conversely, over time some wants can evolve into needs. Take as an example the automobile-reliant transportation in cities without adequate public transportation. In such cities, an automobile becomes a "must have" object.

Some wants tend to become needs as a society becomes more affluent. For example, the rural population in some countries could not afford footwear and hence walked barefoot. However, in countries that are more developed, footwear is a need and not merely a want.

The important take-away here is that wants and needs are contextual. They must be considered with reference to the geographies under consideration. Hence, it is important that companies involve consumers from the relevant geographies when they co-create innovations for specific geographies.

INNOVATION EVOLUTION PATHS

The innovation cube as defined in Narasimhalu (2005) provides a framework to represent the attributes of successful innovations and has evolved to incorporate innovation rules as a part of the innovation engine (Narasimhalu, 2007).

Fig. **3** presents the innovation cube. The innovation cube is defined by three dimensions—innovation drivers, innovation triggers, and innovation enablers.

Innovation drivers are either pain or pleasure. Pain suffered by a community of consumers or enhanced experiences (pleasure) sought by another community are drivers of successful innovations. Pain roughly corresponds to needs and pleasure roughly corresponds to wants. The deeper the pain and the more widespread it is, the greater the value created and market size. The same is true of the pleasure.

Innovation triggers are market shifts and technology shifts. Although a pain or pleasure is identified, the markets and the technologies must be ready. Otherwise, they remain as future innovations and do not have immediate promise. Such innovations succeed when the markets and technologies are ready.

Some innovations fail despite satisfying the innovation drivers and triggers. This is mainly due to their inability to scale to fit in the market or when the price is not right. The price and the speed of scaling were identified as innovation enablers.

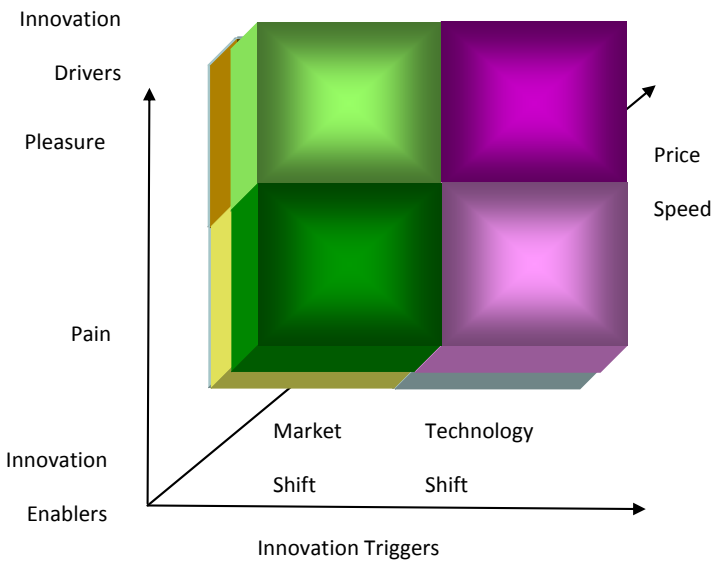

Figure 3: The innovation cube framework.

The innovation cube was used to derive innovation rules. The sample innovation rule presented in Fig. **4**, in a schematic format, shows the evolution of several product lines such as computers, fax machines, and copiers.

For example, computers were created for defense purposes and then moved on to provide enterprise-level solutions, department-level solutions, and desktop solutions, before ending up as laptop computers and PDAs or smart phones.

Every innovation rule has two or more stages or levels linked by arrows. When an innovation lies at a given level, e.g, the enterprise level in rule 1, market readiness and the technology readiness will trigger innovations at a division level. The rule would read: "If the markets and technologies are ready for the transition from the enterprise to the division level, then create the division-focused innovation. Otherwise, either create the technology required for the innovation, or if the technology is available then wait for the markets to be ready".

One way to determine when markets are ready involves consumers. When an innovation is at the enterprise stage and the technology for transitioning it to the divisional stage is ready, then consumer inputs can reveal whether or not

consumers have a need or a want for a division-level innovation. When the consumers long for a division-level solution then it is time to create such an innovation. Then, co-creation managers can work with consumers to apply innovation rules and identify new innovation opportunities.

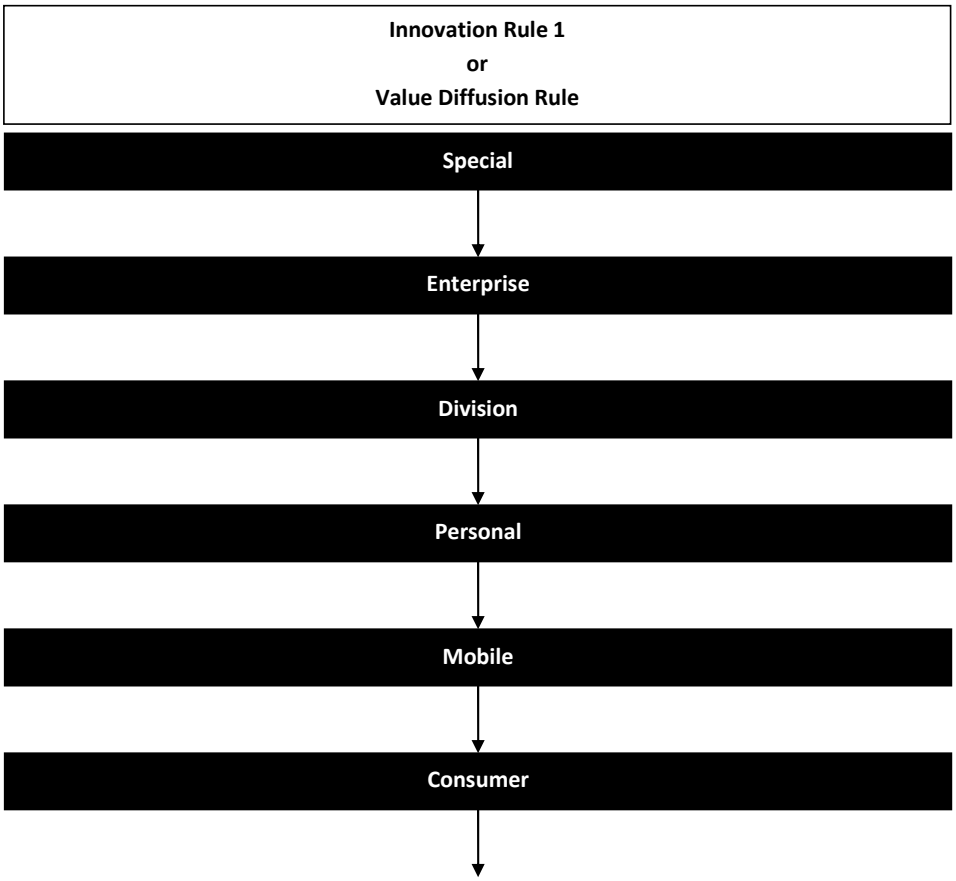

Figure 4: An example of an innovation rule.

USING ABDUCTION FOR CONSUMER-INSPIRED INNOVATION

Whereas deduction allows deriving "A" as a consequence of "B," and induction allows inferring the association between "A" and "B" from multiple occurrences of "A" and "B," abduction allows the inference of "A" as an explanation of "B". Abductive reasoning analyzes a set of seemingly unrelated facts in order to create the type of hypothesis sometimes referred to as a hunch.

When companies have a "hunch" that an innovation would be relevant to a target market, they could actively engage the target customers in order to fine-tune the manifestation or prototype of the innovation. For example, if a furniture design and manufacturing company were to plan products for single females, then it is likely to have a hunch on what type of product innovations might make sense for this target market. It would be prudent of this company to engage a collection of its unmarried female customers to help design the furniture for them.

The selection of the target group of single females will again have to be sensitive to the context of the target market. For example, whereas there might be some common requirements across all single females from different geographies, religions, and cultures, there could very well be a special/customized requirement for every subset of single females the company targets as its customers.

OPEN INNOVATION—ITS IMPACT ON CONSUMER-INSPIRED INNOVATION

Open innovation can take place at multiple levels as described in Narasimhalu (2008) and presented in Fig. **5**. Consumer-inspired innovations could be co-created from any of the levels of this model. For example, using consumers at large, consumer-inspired innovation can happen at the highest level in the open innovation model. In contrast, consumer-inspired innovation at the enterprise level will operate the level 4 of the open innovation model.

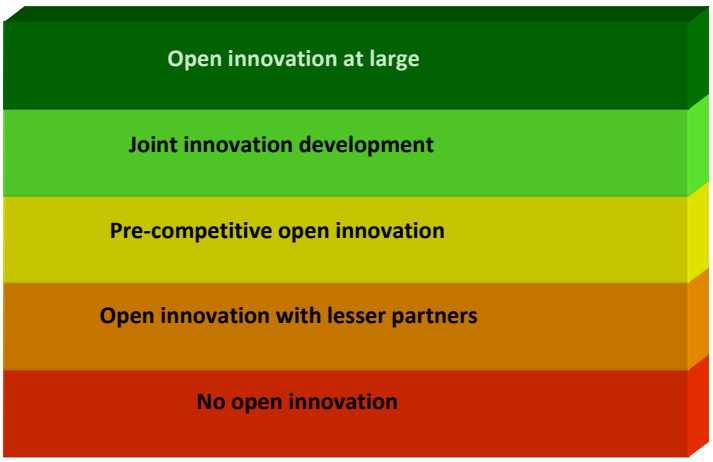

Figure 5: Multiple levels of open innovation.

Crowd-sourcing is another example of an open innovation method (Howe, 2006). Crowd-sourcing is, in fact, the best example of co-creating innovation with the involvement of consumers.

Companies can decide which of the levels of the open innovation models presented in Fig. **5** is relevant to a consumer-inspired innovation.

A Framework for Consumer-Inspired Innovation

Discussions of Maslow's hierarchy of needs, innovation evolution paths, cultural diversity, needs and wants, open innovation, and abductive reasoning all can be sewn into a framework for an innovation process inspired by consumers. Fig. **6** presents such a framework.

Maslow's hierarchy of needs, innovation evolution path, or any other method could be used to derive candidate innovations. These candidates can then be processed through the innovation engine in order to verify the readiness of innovation triggers, *i.e.* markets and technologies required for creating the innovations. Innovations for which both the markets and technologies are not ready will be stopped at this stage.

The candidate innovation that passes the innovations triggers test will then be passed through the "wants–needs filter" in order to determine whether it is a want-based or a need-based innovation. Want-driven innovations will have a target market that is generally much smaller than the markets of need-driven innovations. Once again, it is important to remember that needs and wants are contextual. A need sometimes crosses over to become a want, and *vice versa*.

At this juncture, wants-driven innovations and needs-driven innovations take two independent but similar paths.

The innovations are first passed through a "culture adaptation engine" to ensure that the innovations meet the cultural sensitivities and that culture-related issues do not pose any adoption hurdles. New requirements might be added to satisfy culture-specific requirements.

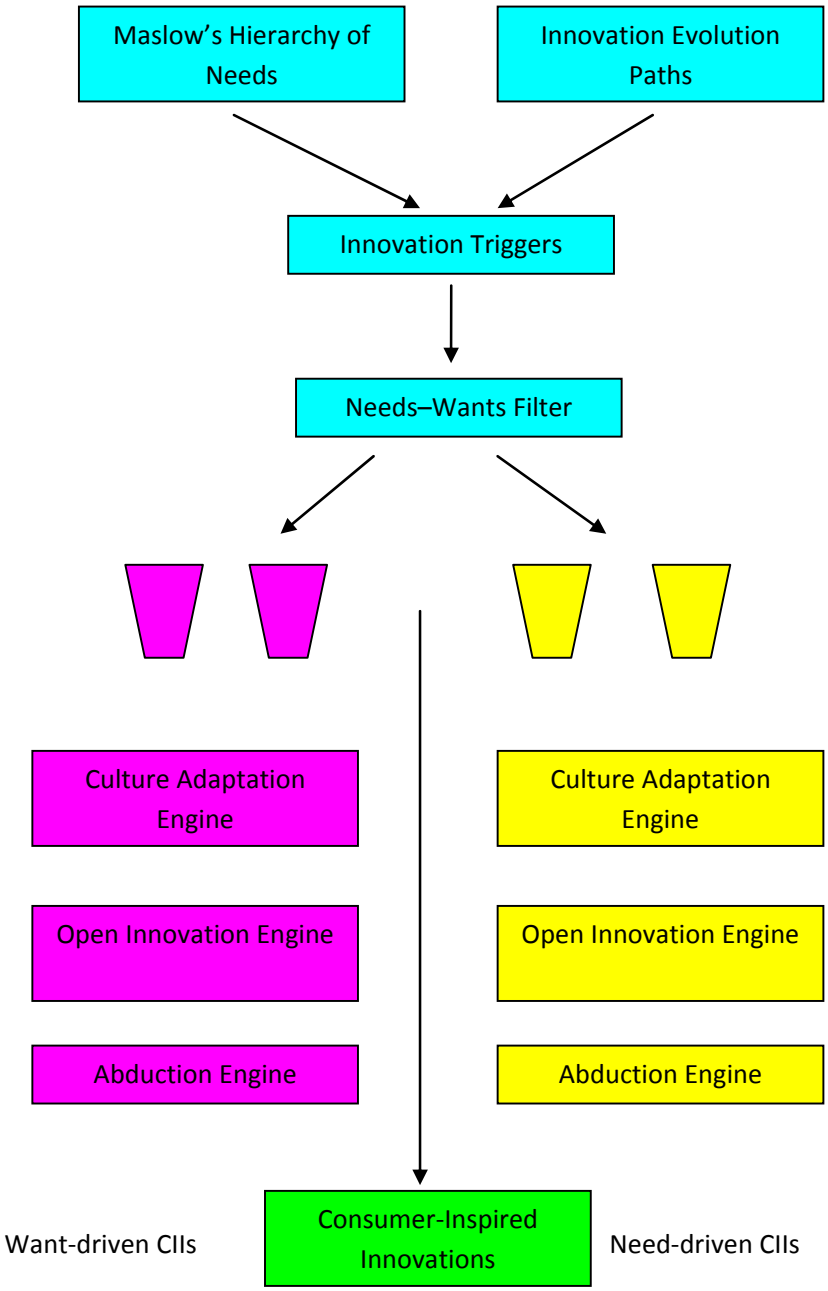

Figure 6: A framework for consumer-inspired innovation process.

The innovations that emerge from the culture adaptation engine are then passed through an open innovation engine. The open innovation engine can suggest the

level of the open innovation model at which consumer/customer participation is recommended. The consumer-inspired innovation manager can then decide whether or not to accept the recommendation or even to alter the recommendation as deemed necessary.

The best recommended consumer engagement model is to observe consumers while they are in their natural environments where the innovation would be used. For example, if the innovation is related to a home television set, it is best then to observe consumers interact with the television in their homes. Such observations remove extraneous artifacts that might be introduced in a controlled environment.

In the absence of an opportunity to observe consumers in action, it might be useful to have someone talk to the consumer using either an audio or a video link. The interviewer ought to be trained how to ask open-ended questions that will emulate the in-person observation.

If all else fails, traditional survey instruments may be used. However, survey instruments are best avoided if at all possible given that most often respondents tend to provide answers that they think the surveyors would expect.

There is an increasing trend to build in some of these capabilities into customer relationship management (CRM) software. CRM software could very well be used to elicit customer inputs on a proposed innovation. CRM software can also be used to receive unsolicited suggestions for innovations from inspired consumers/customers.

All the inputs on a candidate innovation received from consumers can then be run through an abduction engine to formulate hypotheses on the consumers' responses; these hypotheses can be tested using social science research methods.

INNOVATION METHODS AND EXAMPLE FROM P&G

This section first presents the consumer-inspired innovation strategy used by P&G, and then introduces some examples of innovations introduced by P&G in different categories.

Developing Innovations Strategies

P&G is a leader in innovation in general and open innovation in particular. P&G plans its innovation projects with the end in mind, from the consumer perspective, typically working backward from a vision that is five years ahead. It then creates a storytelling initiative, which acts as the master plan. The initiatives are aimed at producing innovation outcomes with bigger, better, faster, and less costly value propositions.

P&G focuses on three types of innovations: (1) sustaining growth-oriented innovations, (2) disruptive market-oriented innovations, and (3) commercial innovations.

Sustaining growth-oriented innovations (SGIs) are developed to fill the gaps in a product line, to eliminate trade-offs, to offer new benefits, or to eliminate product negatives. Gillette Fusion Power is an example of an innovation in this category.

Disruptive market-focused innovations (DMIs) create entirely new sources of consumption that are likely to introduce new users by perhaps even cannibalizing current markets. The aim of this category of innovations is to make the "impossible" possible by creating innovations that, over time, evolve into stand-alone product categories. The pitfall against which one must guard, is to avoid getting caught up in the desire to perfect an innovation, without, however, understanding what the target markets might consider to be good enough. P&G carefully monitors such innovations to ensure that such products have low knowledge/assumption ratios. Some examples of DMIs are Pampers diapers, Swiffer Wet Jet, and Crest White Strips.

Innovations that fall under the commercial category are generally market innovations without any product or package changes. These are designed to help provide constant news, encouraging new consumers to try the product and turn into loyal customers who purchase the product again.

P&G's disciplined, scientific approach to innovation often includes a life-cycle assessment of a product. P&G helped pioneer this research tool, which looks at environmental factors such as carbon dioxide, energy and water consumption, and waste over the entire lifespan of a product from raw materials, to product

manufacture and logistics, to consumer use, and to the final post-consumption disposal. This comprehensive approach helps P&G identify the biggest opportunities to improve the environmental impact of its products.

Profoundly Understanding Customers

P&G focuses its efforts on delighting what it calls the "sustainable mainstream consumer". This group of customers typically comprises 75% of reachable consumers in each of its key geographic regions.

P&G has made a substantial investment in understanding its customers' beliefs, habits, and what drives their purchasing decisions. P&G tracks newly emerging definitions of value in the mind of the customer to guide development. The value triad comprises three critical elements: performance, price, and sustainability profile. The customer generally will not and often does not sacrifice performance or price for environmental benefits, especially in tough economic times.

P&G has defined internal criteria for "sustainable innovation products". Innovation falling under the sustainable products label ought to:

- Reduce usage by more than 10% in resources such as energy, water, transportation, packaging, and product material without trading off benefits in other indicators.

- Be supported by good science that is substantiated by data and must be verified by their stringent claim approval systems.

P&G deploys the three-stage DID (define, invent, demonstrate) model to design, develop, and deliver its innovations. Table **3** captures the tasks carried out in the three stages for the sustaining growth-oriented and disruptive market-focused type of innovations.

Innovation Examples From P&G

NA Laundry Compaction Product

An example of sustainable product innovation is P&G's NA Laundry Compaction product from its fabric care division. The product innovators doubled the

concentration of their liquid laundry formula. The result was a holistic product redesign, generating high-impact benefits across the entire product life cycle. The new product was delivered in smaller packaging because of increased concentration. The annual savings were clearly measureable: 15,000 metric tons of packaging material; 40,000 fewer truckloads in shipping; savings of 500 million liters of water; and reducing carbon dioxide emissions by 100,000 metric tons in addition to the tacit benefit of the consumers having to deal with smaller packages. This also resulted in less inventory space for P&G, their distributors, and dealers. The outcome was substantially more sales. The shelf space required at the retailers' shelves were also almost halved.

Table 3: Proctor and Gamble's Innovation Methodologies.

Stage and SGI	DMI
Define	
• Identify consumer targets and their desired customer experience (DCE) • Develop the corresponding consumer concept/idea • Validate the business attraction/opportunities • Identify key inventions needed to address in the invent stage	• Select new domain • Identify the new consumers for the disruptive market innovation • Define the tasks to be carried out
Invent	
• Create solutions • Resolve areas requiring invention • Create solutions to killer issues • Screen through technologies • Develop proof of concept • Identify killer issues for development & resolution at demonstrate stage	• Develop the new business model • Resolve two to three assumptions to knowledge transfer
Demonstrate	
• Define the winning link between consumer need, innovation concept, product design, and underlying technology • Resolve major issues related to integration and development	• Ensure that all components of the business model work profitably • Identify early adoption markets that will build to inflection point

Ariel Turn to 30°

Ariel Turn to 30° is an example of a commercial innovation. The brand "pleaded" with the UK washing machine users to turn their water heating choice from 43.5°C to 30°C. The campaign explained how 80% of the energy in a washing

machine is used to heat the water, and that there would be little difference in turning down the heat. A key communication point was that the savings allow the consumers to watch around 1,500 episodes of their favorite soap opera, or boil enough water to make 2,600 cups of tea. This campaign resulted in 17% of the consumers turning their heating choice to 30°, up from 2%. The result prevented the creation of 58,000 metric tons of CO_2 emissions. In 2007, this number went up to 30%. This campaign positioned P&G as a responsible thought leader for sustainable products and practices.

Charmin MegaRoll

Many innovations that are visible to consumers are also inspired by them. When Charmin bath tissue consumers expressed a desire to change the roll less frequently, P&G created Charmin MegaRoll, which features four times as many sheets per roll than a regular roll of Charmin. Along with meeting consumer needs, the Charmin MegaRoll required fewer cardboard cores, first for use, and then, of course, for disposal. In addition, the space-efficient product allows more tissue to fit on a truck, saving on fuel consumption and CO_2 emissions associated with transportation. Fig. **7** presents the impact from the Charmin MegaRoll innovation.

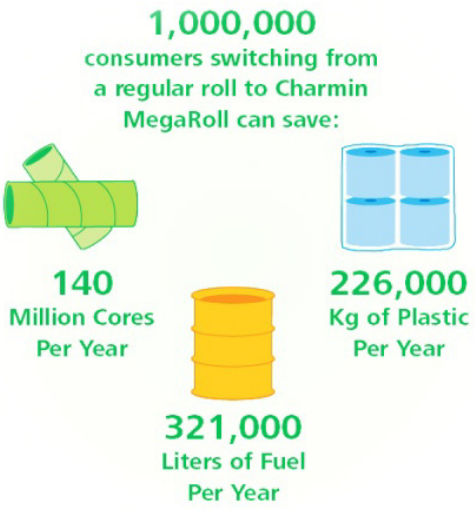

Figure 7: Impact of Charmin MegaRoll innovation.

Packaging Innovations

Consumer research on Prilosec indicated that getting the tablet from the blister pack was the number one consumer complaint. Novel design and technical innovation led to the development of an easier-to-access blister, which still metal safety requirements. This solution improved the consumer's experience while using Prilosec. By combining two blisters into a single blister, the brand saved more than 500,000 pounds of material annually.

Reduction in packaging can represent a step improvement in environmental sustainability. An example of such an innovation can be found in the Cover Girl cosmetics line. Consumer testing and market research of Cover Girl TruBlend facial foundation product showed that less packaging actually provided a better presentation to the consumer of the product on the shelf. It also led consumers to select the proper shades of their foundation with increased accuracy and satisfaction.

This research finding ended up eliminating the secondary packages, which surround the primary dispenser bottle leading to better product displays, easier shade selection, and more than 20% reduction in packaging.

Pampers

Pampers was invented in the 1960s with a breakthrough technology designed to deliver high-quality fit, softness in materials, and non-leaky product design. The product created a revolution in the market when introduced. However, as competition started entering this category, P&G realized that it needed to focus on the end user, *i.e.* baby and mother (in line with the "consumer is the boss" principle). P&G had to deliver a purpose-inspired innovation in addition to the technology. Furthermore, P&G had to communicate their product upgrades in terms of the difference and the improvement these upgrades offered to the baby's development. The core idea was to move away from comfortable, functional, and traditional promises to baby's happy, healthy development by connecting with mothers, *i.e.* digital marketing, mobile clinics for babies, *etc.*

In developing countries, the challenge was even more acute, especially regarding the need to change the habit from the use of cloth for diapers to the adoption of modern solutions. Mothers in these markets traditionally looked at Pampers as a "convenient" option especially for night usage, and they were least interested in

using them regularly. Yet the moment P&G was able to move the product benefit focus in their communications from functional to baby care and development, the mind-set of the mothers changed, resulting in increased adoption for regular use. P&G drove consumer-inspired innovation and converted Pampers into a purpose-inspired and benefit-driven brand combining two key elements—caring for babies and mothers and delivering functionally superior benefits, respectively.

SUMMARY AND CONCLUSIONS

Consumer-inspired innovation is not a stand-alone concept. It takes its inspiration from works related to open innovation, crowd-sourcing, co-creation, and bottom of the pyramid. This chapter integrates the above concepts with Maslow's hierarchy of needs, innovation cube, and innovation rules to derive at a framework for open innovation. P&G's experience and commercial successes suggests that the framework has essential validity to guide ongoing innovation.

CONFLICT OF INTEREST

None declared.

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None declared.

REFERENCES

Chesbrough, H. W. (2003). Open innovation: The new imperative for creating and profiting from technology. Boston, MA: Harvard Business School Press.

Howe, J. (June, 2006). The rise of crowdsourcing. Wired. Retrieved March 17, 2007, from http://www.wired.com/wired/archive/14.06/crowds.html

LSE Enterprise & Promise Corporation (2009). Co-creation: New pathways to value. http://personal.lse.ac.uk/samsona/CoCreation_Report.pdf (retrieved June 14, 2010).

Maslow, A. H. (1943). A theory of human motivation. Psychological Review, 50, 394–395.

Narasimhalu, A. D. (2005, June). Innovation cube: Triggers, drivers and enablers for successful innovations. ISPIM Conference, Porto, Portugal, June 19-22, 2005.

Narasimhalu, A. D. (2007, June). *Innovation engine***,** *ISPIM Conference*, Warsaw, Poland, June 17-20, 2007.

Narasimhalu, A. D. (2008, June). A maturity model for innovation management. ISPIM Conference, Tours, France, June 14-19, 2008.

Prahalad, C. K. (2005). The fortune at the bottom of the pyramid – Eradicating poverty through profits. Saddle River, NJ: Wharton School Publishing.

Prahalad, C. K. & Ramaswamy, V. K. (2000). Co-opting customer competence. Harvard Business Review, 78(1), 79-87.

Prahalad, C. K. & Ramaswamy, V. (2004). The future of competition, co-creating unique value with customers. Boston, MA: HBS Press.